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EXAMINER

ROSSI, JESSICA

ART UNIT PAPER NUMBER

1733

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,373

Applicant(s)

KRAMER, WALTER

Examiner

Jessica L. Rossi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/11/03, 1/15/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Europe on 10/17/02. It is noted, however, that applicant has not filed a certified copy of the 02023278.1 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

2. It is noted that the US '540 reference listed on the 1/15/04 IDS was crossed-off by the examiner – this is because Applicant already listed the reference on the 9/11/03 IDS.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7, 9-17, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bodford et al. (US 5705011).

With respect to claim 1, Bodford et al. is directed to making a composite web useful in medical and industrial protective garments such as surgical gowns, disposable protective garments, etc. (column 6, line 66 – column 7, line 2). The reference teaches applying to a first web 14 from a multiplicity of nozzle orifices a multiplicity of thread-shaped strands 20 of a molten bonding polymer and bonding the strands to the first web in a pattern leaving bonding-polymer-free regions on the first web (Figure 3; column 3, line 66 – column 4, line 1; column 4, lines 1-16 and 29-45; column 5, lines 6-15; column 5, lines 57-60). The reference teaches

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applying a second web 12 to the strands and bonding the second web to the strands (Figure 3).

The reference teaches one of the webs being a film/foil and the other web having an open-pore structure (column 3, lines 34-43; column 7, lines 62-65).

Regarding claim 2, the reference teaches the open-pore structure web being a nonwoven textile (column 2, lines 34-37; column 7, lines 9-15).

Regarding claims 3 and 13, the reference teaches the foil being formed as a synthetic resin foil (column 2, lines 37-43; column 7, lines 26-30).

Regarding claims 4 and 14, the reference teaches the first web 14 being the foil and the second web 12 being the nonwoven (Figure 1; column 2, lines 34-43; column 3, lines 34-37).

Regarding claims 5-7, the reference teaches the molten bonding polymer deposited on the first web in thread-shaped strands having a thickness ranging from 3-100 microns (= 3-100 um; column 4, lines 1-20).

Regarding claim 9, the reference teaches depositing the bonding polymer on the first web by at least one melt blown nozzle (column 4, lines 7-10; column 5, lines 12-21).

Regarding claim 10, the reference teaches both webs being made from a polyolefin (column 7, lines 9-30).

Regarding claims 11-12, the reference teaches the bonding polymer applied to the first web in an amount of 1-23 g/m² (column 4, lines 46-48).

Regarding claims 15-17, the reference teaches the molten bonding polymer deposited on the first web in thread-shaped strands having a thickness ranging from 3-100 microns (= 3-100 um; column 4, lines 1-20).

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Regarding claim 19, the reference teaches depositing the bonding polymer on the first web by at least one melt blown nozzle (column 4, lines 7-10; column 5, lines 12-21).

Regarding claim 20, the reference teaches both webs being made from a polyolefin (column 7, lines 9-30).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-2 and 18-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Welch et al. (WO 02/059410; provided in IDS).

With respect to claim 1, Welch is directed to making a composite web useful in medical and industrial protective garments (p. 5, lines 11-16). The reference teaches applying to a first web from a multiplicity of nozzle orifices a multiplicity of thread-shaped strands of a molten bonding polymer and bonding the strands to the first web in a pattern leaving bonding-polymer-free regions on the first web (p. 5, lines 20-22; p. 11, lines 25-28; p. 14, lines 4-6). The reference teaches applying a second web to the strands and bonding the second web to the strands (p. 20, lines 5-13). The reference teaches one of the webs being a film/foil and the other web being a non-woven, which inherently has an open-pore structure (p. 18, lines 15-17; p. 11, lines 25-26).

Regarding claim 2, the reference teaches the other web being a nonwoven textile (p. 11, lines 25-26).

Regarding claim 18, the reference teaches depositing the strands in a wave pattern (p. 5, lines 25-30; p. 11, lines 8-16).

Regarding claim 19, the reference teaches depositing the polymer by at least one melt-blown nozzle (p. 12, lines 21-23; p. 14, lines 4-6).

Regarding claim 20, the reference teaches at least one web made from polyolefin (p. 17, lines 9-11; p. 19, lines 14-15).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodford et al. as applied to claims 1 and 5 above and further in view of Kwok et al. (US 5882573; provided in IDS).

Regarding claims 8 and 18, Bodford is silent as to depositing the polymer threads in a wave pattern. It is known in the art to make a composite web useful in medical and protective garments by applying strands of molten bonding polymer to a first web in a wave pattern and then bonding a second web to the strands, as taught by Kwok (Figure 1; column 1, lines 22-30; column 4, lines 39-44 and 47-50 and 64-66; **column 9, lines 42-43**); it being noted that present specification acknowledges Kwok teaches depositing the polymer strands in a wave pattern (p. 6, lines 9-11).

It would have been obvious to the skilled artisan to deposit the polymer strands of Bodford in a wave pattern because such is known in the art, as taught by Kwok, wherein use of a particular pattern allows certain characteristics to be imparted to the composite.

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9. Claims 3-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welch et al. as applied to claim 1 above and further in view of Bodford et al.

Regarding claims 3 and 13, Welch teaches a foil/film but is silent as to it being a synthetic resin foil/film. It would have been obvious to the skilled artisan to use a synthetic resin for the foil/film of Welch because such is known in the art, as taught by Bodford (see paragraph 4 above for complete discussion), wherein the use of such a foil/film imparts certain desirable characteristics to the composite.

Regarding claims 4 and 14, Welch is silent as to whether the strands are applied to the foil/film or nonwoven. Selection of a particular web to apply the strands to would have been within purview of the skilled artisan; however, it would have been obvious to apply the strands to the foil/film because such is known in the art, as taught by Bodford (see paragraph 4 above).

Regarding claims 5-7 and 15-17, Welch is silent as to thickness of the strands. It would have been obvious to deposit strands having a thickness in the claimed range because such is known in the art, as taught by Bodford (column 4, lines 1-20), wherein such a thickness results in excellent bonding between the foil and nonwoven webs.

Regarding claim 8, Welch teaches depositing the strands in a wave pattern (p. 5, lines 25-30; p. 11, lines 8-16).

Regarding claim 9, Welch teaches depositing the polymer by at least one melt-blown nozzle (p. 12, lines 21-23; p. 14, lines 4-6).

Regarding claim 10, Welch teaches at least one web made from polyolefin (p. 17, lines 9-11; p. 19, lines 14-15).

Regarding claims 11-12, Welch is silent as to the amount of polymer applied to the first web. It would have been obvious to the skilled artisan to apply an amount of polymer to the first web of Welch that falls within the claimed range because such is known in the art, as taught by Bodford (column 4, lines 46-48), wherein such an amount results in good bonding between the webs without sacrificing flexibility and softness.

10. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwok et al. in view of Bodford et al.

With respect to claim 1, Kwok is directed to a method of making a composite web useful in medical and industrial protective garments such as surgical gowns, disposable protective garments, etc. (column 1, lines 22-30; column 4, lines 39-44). The reference teaches applying to a first web S from a multiplicity of nozzle orifices a multiplicity of molten polymer strands and bonding the strands to the first web in a pattern leaving bonding-polymer-free regions on the first web (Figure 1; column 4, lines 47-66; column 5, lines 36-38). The reference teaches applying a second web to the strands and bonding the second web to the strands (column 1, lines 26-30).

The reference is silent as to the strands being thread-shaped, one of the webs being a foil, and the other web having an open-pore structure.

It would have been obvious to the skilled artisan at the time the invention was made to use a foil and nonwoven having an open-pore structure for the webs of Kwok and deposit the strands of Kwok as thread-shaped strands because it is known in the art to make a composite web useful in medical and protective garments by applying thread-shaped strands of molten bonding polymer to a first foil web and then bond a second open-pore structured nonwoven web to the strands, as taught by Bodford (see paragraph 4 above for complete discussion), wherein the

combination of a film and open-pore structured nonwoven bonded by thread-shaped polymer strands provides characteristics desirable in medical and protective garments.

Regarding claim 2, Bodford teaches the open-pore structure web being a nonwoven textile (column 2, lines 34-37; column 7, lines 9-15).

Regarding claims 3 and 13, Bodford teaches the foil being formed as a synthetic resin foil (column 2, lines 37-43; column 7, lines 26-30).

Regarding claims 4 and 14, Bodford teaches the first web 14 being the foil and the second web 12 being the nonwoven (Figure 1; column 2, lines 34-43; column 3, lines 34-37).

Regarding claims 5-7 and 15-17, Kwok is silent as to thickness of the strands. It would have been obvious to deposit strands having a thickness in the claimed range because such is known in the art, as taught by Bodford (column 4, lines 1-20), wherein such a thickness results in excellent bonding between the foil and nonwoven webs.

Regarding claims 8 and 18, Kwok teaches depositing the strands in a wave pattern (Figure 1; column 9, lines 42-43).

Regarding claims 9 and 19, the reference teaches depositing the bonding polymer on the first web by at least one melt blown nozzle (column 4, lines 63-64).

Regarding claims 10 and 20, Bodford teaches both webs being made from a polyolefin (column 7, lines 9-30).

Regarding claims 11-12, Kwok is silent as to the amount of polymer applied to the first web. It would have been obvious to the skilled artisan to apply an amount of polymer to the first web of Kwok that falls within the claimed range because such is known in the art, as taught by

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Bodford (column 4, lines 46-48), wherein such an amount results in good bonding between the webs without sacrificing flexibility and softness.

Regarding claim 19, the reference teaches depositing the bonding polymer on the first web by at least one melt blown nozzle (column 4, lines 7-10; column 5, lines 12-21).

Regarding claim 20, the reference teaches both webs being made from a polyolefin (column 7, lines 9-30).

Double Patenting

11. Applicant is advised that should claim 4 be found allowable, claim 14 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is 571-272-1223. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine R. Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jessica L. Rossi
Art Unit 1733